Jurnal Ilmiah Akuntansi dan Bisnis
Volume 10, Number 2, 2025 pp. 163-171
P-ISSN: 2528-2093 E-ISSN : 2528-1216
Open Access: https://journal.undiknas.ac.id/index.php/akuntansi/

The Board Independence and Performance Nexus: The Moderating Role of Firm Size

Luh Putri Mas Mirayani*
Universitas Mahasaraswati Denpasar, Bali, Indonesia

A R T I C L E I N F O
Article history:
Received: 2025-08-10
Revised: 2025-09-07
Accepted: 2025-11-22
Available Online: 2025-12-01

Kata Kunci:
Independent Commissioners, Return on Asset, Firm Size

DOI:
https://doi.org/10.38043/jiab.v10i2.7138

A B S T R A C T

This study examines the relationship between board independence and firm performance, emphasizing the moderating role of firm size in Indonesia's manufacturing sector during 2021-2023. Grounded in Agency Theory, the research investigates how the proportion of independent commissioners affects Return on Assets (ROA) and whether firm size influences this relationship. Using a quantitative causal-associative approach with 177 firm-year observations from 59 listed manufacturing companies on the Indonesia Stock Exchange (IDX), the data were analyzed through Moderated Regression Analysis (MRA) after passing all classical assumption tests. The findings reveal that a higher proportion of independent commissioners significantly improves firm profitability (ROA). However, firm size negatively moderates this relationship, meaning that the positive effect of board independence weakens as firms grow larger. This result indicates that independent commissioners are more effective in smaller firms where their monitoring and advisory functions can operate without bureaucratic constraints, while in larger firms, their influence is limited by managerial entrenchment and structural complexity. Theoretically, this study enriches Agency Theory by demonstrating that board independence does not have a uniform impact but depends on organizational context specifically, firm size. Practically, the results encourage regulators and investors to move beyond a "one-size-fits-all" governance framework by strengthening the actual capacity and authority of independent commissioners in large corporations.

1. INTRODUCTION

The manufacturing sector is vital to economic development because it generates new ideas, jobs, and long-term growth. As a result, everyone from investors to managers to lawmakers is very concerned about making sure that manufacturing enterprises have strong financial performance, which is typically assessed by Return on Assets (ROA) (Al-Saidi, 2021; Adanan et al., 2023). Extensive research has been conducted on corporate governance structures with the aim of maximizing firm performance. One of the most important tools for keeping an eye on management and safeguarding shareholder interests is the board of commissioners, and more specifically, the percentage of independent commissioners (Mokhtar et al., 2023; Protus & Tuwey, 2024).

Nevertheless, there is a dearth of clear empirical data on how independent commissioners affect return on assets (ROA) for firms. According to a large amount of research, independent directors improve oversight, lower agency expenses, and result in better financial outcomes (Al-Saidi, 2021; Adanan et al., 2023). However, there are studies that find no correlation or even a negative one. These studies imply that independent commissioners might not have adequate knowledge of the industry, are just "rubber stamps," or aren't involved in making strategic decisions beyond monitoring (Potharla & Amirishetty, 2021; Lestari, 2021).

This ongoing lack of study implies that additional organizational elements influence the non-linear relationship between board independence and ROA. The complexity of modern organizations is too great for the oversimplified "one-size-fits-all" approach of governance to handle. More specifically, the board's ability to effectively supervise the firm could be greatly affected by factors including the firm's size and complexity (Potharla & Amirishetty, 2021; Korir & Tenai, 2020).

According to this research, there are two main reasons why this research is crucial. To begin, we take a look at the manufacturing sector in Indonesia in the years 2021-2023, a pivotal juncture between the post–pandemic economic recovery and changing regulatory environments. The economic stability of Indonesia depends on our ability to identify the factors that influence performance in this high-impact industry. Another reason to look into moderating variables is that previous research has shown contradictory outcomes.

Theoretically, this study adds to Agency Theory by highlighting the importance of firm size as a moderator. We go deeper into the topic of independent commissioners' impact on performance, asking when and under what circumstances they are most effective. For the Financial Services Authority (OJK) and the Indonesia Stock Exchange (IDX), this study offers practical insights about governance regulations. Additionally, it provides investors with recommendations on how to measure the efficiency of a company's management system in relation to its size.

This study offers a fresh perspective by focusing on the size of the firm as a variable that influences the impact of independent commissioners on return on assets (ROA) in the modern (2021–2023) industrial context of Indonesia, a market that is frequently disregarded in favor of more developed nations. To that purpose, this study aims to 1) determine whether there is a direct correlation between the percentage of independent commissioners and ROA, and 2) determine whether firm size moderates this correlation.

A. Agency Theory

This study is grounded in Agency Theory, which was proposed by Jensen and Meckling in 1976. The current corporation is defined by a wall between ownership and control, which this theory aims to address. This creates basic conflicts of interest. This organizational model is based on the principle of principal-agent theory, according to Korir and Tenai (2020) and Wu (2021), in which owners and shareholders entrust decision-making responsibilities to chief executive officers (CEOs).

The fundamental "agency problem" emerges when agents' goals do not always coincide with those of the principals. Agents, like principals, are rational utility maximizers driven by self-interest; however, principals are assumed to pursue wealth maximization. Management has better and more detailed knowledge about the firm's operations, opportunities, and real performance than the dispersed and less-informed shareholders, a situation known as information asymmetry (Lestari, 2021; Nahar et al., 2022). As a result, this disparity is worsened.

Managerial opportunism may arise as a result of competing interests and a lack of transparency. 'Empire building,' excessive perquisite consumption, and managerial entrenchment are examples of agent acts that profit themselves at the cost of principals. Jensen and Meckling (1976) described agency costs as a result of these tensions. In order to reduce overall agency expenses and alleviate these agency concerns, corporate governance procedures are put in place (Adanan et al., 2023; Arora, 2024). The very purpose of instituting corporate governance systems is to lessen the impact of these agency issues and the overall expense of agencies. According to AlSaif et al. (2022) and Nahar et al. (2022), the principal internal monitoring mechanism is the board of commissioners, which acts as the "watchdog" for the shareholders. According to agency theory, this kind of oversight can only be useful if the board is impartial with respect to the management it controls.

The number of impartial commissioners is crucial at this stage. Each commissioner must be completely disenchanted from the company, its leadership, and its controlling owners in order to be considered truly independent. (Mokhtar et al., 2023; Protus & Tuwey, 2024) The belief is that the board's monitoring capacity is enhanced by their external status and objectivity. This allows them to impartially evaluate management, challenge poor strategic decisions, and ensure that managerial actions are consistent with shareholder wealth maximization. This study measures financial performance by Return on Assets (ROA) and finds that a strong, independent board can effectively reduce agency costs and managerial opportunism, leading to more efficient use of company assets and better financial results (Adanan et al., 2023; Rahayu & Feliana, 2022).

B. The Effect of Independent Commissioners on ROA

The principals' (shareholders') interests are shielded from the agents' (management's) possible self-serving acts by the board of commissioners, according to Agency Theory (Jensen & Meckling, 1976; Al-Saidi, 2021). Adanan et al. (2023) and Mokhtar et al. (2023) found that the effectiveness of this monitoring role is greatly influenced by the independence of the board. Theoretically, a better firm's performance could be the result of a board with a higher share of independent commissioners (Korir & Tenai, 2020; Rahayu & Feliana, 2022).

This favorable association has a two-pronged process (Arora, 2024). According to AlSaif et al. (2022), independent commissioners are outside directors who do not have any substantial personal, financial, or familial ties to the company or its top management. One would think that this structural separation would help people be more objective (Nahar et al., 2022). Commissioners appointed by outside parties are able to offer objective monitoring, in contrast to linked or internal directors who may have financial or professional ties to the chief executive officer (Mokhtar et al., 2023). Managers' "empire-building" purchases, exorbitant CEO salary, and misleading financial reporting are examples of acts that they are more inclined to question (Lestari, 2021; Gatehi & Nasieku, 2022). The board guarantees optimal use of corporate resources by limiting management opportunism and minimizing these particular agency costs (Adanan et al., 2023).

Furthermore, independent commissioners enrich the firm with their outside knowledge, unique viewpoints, and extensive professional networks (Protus & Tuwey, 2024). Arora (2024) states that their responsibility goes beyond just "policing" and includes active advice. Decisions about the future can benefit from their outside perspective (Nahar et al., 2022). Instead of relying on their own personal political prejudices, they should use objective standards to assess strategic initiatives, risk-management policies, and large capital expenditures (Al-Saidi, 2021). To avoid wasting money on low-performing initiatives, this revamped strategic function prioritises those with the best return on investment (Korir & Tenai, 2020).

Return on Assets (ROA) is anticipated to be enhanced as a direct result of this dual function, which lowers agency costs and improves decision quality (Adanan et al., 2023). A company can preserve and even grow its net income by cutting back on unnecessary spending and executive perks (Gatehi & Nasieku, 2022). The firm's total asset base produces greater returns by maximizing asset usage and avoiding low-return ventures (Lestari, 2021). Higher returns on assets (ROA) and other financial metrics are associated with better financial performance for companies that have a larger proportion of independent directors (Mokhtar et al., 2023; Al-Saidi, 2021). Our working hypothesis is based on the following theoretical and empirical grounds:
H1: The proportion of independent commissioners has a positive effect on Return on Assets (ROA).

C. The Moderating Role of Firm Size

The usefulness of a particular governance structure, like a large number of independent commissioners, depends on the organizational context in which it operates, according to potharla and amirishetty (2021) and Korir and Tenai (2020), who draw on contingency theory. According to Arora (2024), the effects of board monitoring are moderated by the fact that the information environment, nature of agency problems, and complexity of large organizations are significantly different from those of small enterprises.

More serious and intricate agency issues tend to arise in bigger companies (Rahayu & Feliana, 2022). The operational and strategic complexity, as well as the diversification across several product lines, geographical marketplaces, and bureaucratic systems, are usually more pronounced in large organizations (Wu, 2021). Because of this intricacy, the information gap between the principals' representatives on the board of commissioners and senior management acts as an agent (Nahar et al., 2022). According to AlSaif et al. (2022), when the board relies heavily on reports that have been filtered by management, non-independent directors find it harder to confront managerial opportunism. Due to their control over substantial resources and authority, CEOs of major businesses are more likely to get entrenched in their positions (Adanan et al., 2023).

Mokhtar et al. (2023) emphasize the increased importance of independent commissioners' monitoring and advisory roles in this complicated and asymmetrical environment. Because of their autonomy from upper management, they are able to successfully question their policies and practices (Protus & Tuwey, 2024). According to Gatehi and Nasieku (2022), independent directors' ability to monitor and advise is improved by the external knowledge and varied experiences they bring to the table. In order to safeguard business performance as evaluated by ROA, examine capital expenditures, and traverse complicated strategic challenges, their presence is crucial (Al-Saidi, 2021; Lestari, 2021).

On the other hand, Pradana and Imelda (2023) note that smaller enterprises pose unique governance issues. There is less information asymmetry because operations are easier and more visible (Kamau, 2023). According to Oruke et al. (2020), the main source of agency conflict can change from management-shareholder dynamics to controlling-minority shareholder dynamics. According to Jannah and Sartika (2022), when this occurs, independent commissioners may merely play a symbolic function in order to fulfill regulatory requirements. Their role as monitors diminishes to the point that they no longer have any impact on the company's performance (Qadorah & Fadzil, 2018).

Independent commissioners have a beneficial effect on return on assets (ROA), which becomes stronger with increasing business size, due to these contextual factors (Korir & Tenai, 2020). The relationship may be weak in small enterprises due to the lack of effective or essential oversight procedures (Lestari, 2021). The necessity for impartial and competent independent boards grows in tandem with the rise in agency expenses and information demands experienced by growing businesses (Nahar et al., 2022; Mokhtar et al., 2023). Consequently, the effect of board independence on ROA is amplified by company size, which functions as a positive moderator (Adanan et al., 2023; Rahayu & Feliana, 2022). Because of this, we arrive to the second hypothesis:
H2: Firm size strengthens the relationship between the proportion of independent commissioners and Return on Assets (ROA).

2. METHOD

This study employs a quantitative research design. A causal-associative approach was chosen because the research aims not only to associate variables but also to test the hypothesized causal effect of board independence (X) on firm performance (Y), as derived from Agency Theory. To specifically test the second hypothesis whether firm size (Z) alters this primary relationship Moderated Regression Analysis (MRA) was selected. MRA is the most appropriate and direct technique for this purpose, as it statistically tests the significance of an interaction term

(Independent Commissioners * Firm Size), providing clear evidence of a moderating effect. The population consists of all 165 manufacturing companies listed on the Indonesia Stock Exchange (IDX) during the 2021-2023 period. A purposive sampling technique was applied based on specific criteria, including: (a) availability of complete annual reports for the observation period, (b) reporting in Rupiah currency, and (c) availability of all data required for the research variables. This resulted in a final sample of 59 companies and a balanced panel dataset of 177 firm-year observations. This research utilizes secondary data sourced from the official IDX website (www.idx.co.id) and company annual reports. To ensure the validity and reliability of the panel data regression model, the data were subjected to classical assumption tests. Specifically, normality was assessed using the Glejser test, multicollinearity was checked using the Variance Inflation Factor (VIF) and Tolerance (TOL) values (ensuring VIF < 10), heteroscedasticity was detected using the Glejser test, and autocorrelation was examined using the Durbin-Watson (DW) test. The analytical technique used to test the hypotheses is Moderated Regression Analysis (MRA).

Tabel 1. Operational definition of variables

Variable	Operational Definition	Indicator	Scale
Return on Asset (Y)	The company's ability to generate net profit (profitability) using its total available assets (Lestari, 2020).	Net Profit After Tax / Total Assets	Ratio
Proportion of Independent Commissioners (X)	The percentage of board of commissioners members who have no affiliation (business, family, or other) with management (directors) or controlling shareholders, enabling them to act objectively (Adanan et al., 2023).	(Number of Independent Commissioners / Total Number of Board of Commissioners Members)	Ratio
Firm Size (M)	The scale of the company, measured by the total assets owned by the firm at the end of the period (Pradana & Imelda, 2023).	Natural Logarithm (Ln) of Total Assets	Ratio

3. RESULT AND DISCUSSION

A. Descriptive Statistics

All of the study's variables have their descriptive statistics presented here. The data features, such as the lowest and maximum values for Return on Asset (ROA), Proportion of Independent Commissioners (PIC), and Firm Size (SIZE), are empirically summarized in this analysis. The data also includes the standard deviation and mean. The research relies on a balanced panel dataset that includes 177 observations from firm-years. Table 2 summarizes these descriptive statistics.

Tabel 2. Descriptive statistics

Variable	N	Minimum	Maximum	Mean	Std. Deviation
ROA	177	-0.95	0.31	0.0377	0.10555
PIC	177	0.25	1.00	0.4189	0.12170
SIZE	177	12.81	30.94	22.9784	5.23587

The descriptive statistics in the table provide an overview of the data for 177 firm-year observations (N=177), constituting a balanced panel dataset from 59 manufacturing companies over the 2021-2023 period. The consistency in the number of observations across all variables indicates that there is no missing data. The dependent variable, Return on Asset (ROA), shows a mean value of 0.0377 (or 3.77%). This indicates that, on average, the sample firms generated a net profit of approximately 3.77% from their total assets. However, the data exhibits significant variability, with a wide range between the minimum value of -0.95 (-95%) and the maximum value of 0.31 (31%). The highly negative minimum value suggests that some firms in the sample experienced substantial operational losses, while the maximum value indicates the presence of highly profitable firms. This volatility is further confirmed by the standard deviation (0.10555), which is notably larger than the mean, signifying that the ROA data points are widely dispersed from the average.

The independent variable, Proportion of Independent Commissioners (PIC), has a mean value of 0.4189 (or 41.89%). This average suggests that the sample firms, on average, comply with common regulatory requirements (e.g., a minimum of 30% or one-third) for independent board representation. The PIC values range from a minimum of 0.25 (25%) to a maximum of 1.00 (100%). The minimum value indicates some firms are slightly below the common 30% threshold, whereas the maximum value signifies observations where the entire board of commissioners is composed of independent members. The standard deviation of 0.12170 (12.17%) shows a moderate degree of variation, suggesting that while there are differences, the proportions are relatively more clustered around the mean compared to ROA.

The moderating variable, Firm Size (SIZE), measured as the Natural Logarithm (Ln) of Total Assets, displays a mean of 22.9784. The substantial range between the minimum value (12.81) and the maximum value (30.94), coupled with a high standard deviation (5.23587), indicates significant heterogeneity in the scale of the sampled firms. The dataset includes companies ranging from relatively small to very large in terms of asset base. This substantial variance in SIZE is highly suitable for this study, as it provides the necessary variation to test its viability as a moderating variable, allowing for an examination of whether the relationship between independent commissioners and ROA differs significantly across firms of varying scales.

B. Classical Assumption Tests

Prior to conducting hypothesis testing using Moderated Regression Analysis (MRA), the data regression model was subjected to a series of diagnostic tests. These classical assumption tests are essential to ensure that the model is valid, reliable, and that the estimates are the Best Linear Unbiased Estimators (BLUE). The diagnostics performed included tests for normality, multicollinearity, heteroscedasticity, and autocorrelation. The results of this diagnostic testing confirm that the research model has successfully met all required assumptions and is free from significant violations. Specifically, the data residuals were found to be normally distributed; the Variance Inflation Factor (VIF) values for all independent variables and the interaction term were well below the conventional threshold of 10, indicating the absence of multicollinearity. Furthermore, the model was found to be free from both heteroscedasticity as indicated by the Glejser Test and serial autocorrelation as indicated by the Durbin-Watson Test. Given that the model has passed all classical assumption tests, the regression results are deemed robust, valid, and reliable for use in hypothesis testing.

C. Hypothesis Testing

This section presents the core empirical findings of the study, conducted to test the formulated hypotheses. Following the confirmation that the research model successfully met all classical assumptions, the study proceeds with hypothesis testing using Moderated Regression Analysis (MRA). This analysis is specifically employed to determine the direct effect of the Proportion of Independent Commissioners (PIC) on Return on Asset (ROA) (H1) and to investigate the moderating role of Firm Size (SIZE) on this primary relationship (H2). The comprehensive results of the regression analysis are summarized in Table 3.

Tabel 3. Hypothesis testing

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-0.210	0.128		-1.636	0.104
	PIC	0.696	0.297	0.803	2.342	0.020
	SIZE	0.014	0.005	0.692	2.613	0.010
	PIC*SIZE	-0.038	0.012	-1.374	-3.080	0.002
Dependent Variable: ROA						

Based on the regression results presented in Table 3, the test for the first hypothesis (H1) examines the coefficient of the Proportion of Independent Commissioners (PIC). The analysis shows a coefficient (B) of 0.696 with a significance value (Sig.) of 0.020. As this significance value is less than the standard 0.05 significance level, it indicates that PIC has a statistically significant and positive effect on ROA. This result provides strong empirical support for H1. This suggests that, within this sample, an increase in the proportion of independent commissioners on the board is associated with an increase in the firm's profitability.

The second hypothesis (H2), which posits that Firm Size moderates the PIC-ROA relationship, is tested by examining the interaction term (PIC*SIZE). The regression output reveals a coefficient of -0.038 for this interaction term, with a high degree of statistical significance (Sig. = 0.002). The significance value, being well below 0.05, confirms that Firm Size (SIZE) does indeed function as a moderator in this model. However, the coefficient for the interaction term is negative (-0.038), which is contrary to the direction hypothesized in H2 (which predicted a positive moderation). Therefore, H2 is not supported. This significant negative interaction effect indicates that Firm Size weakens the positive relationship between the Proportion of Independent

Commissioners and ROA. In practical terms, this finding suggests that the positive impact of board independence on profitability is strongest in smaller firms and diminishes as firms become larger.

E. Coefficient Determinant (R^2)

The coefficient of determination (R^2) test is employed to evaluate the "goodness of fit" of the overall regression model. This statistic measures the proportion of the total variance in the dependent variable (ROA) that can be collectively explained by the independent variable (PIC), the moderating variable (SIZE), and their interaction term. The Adjusted R Square is specifically assessed as it provides a more conservative and accurate measure of explanatory power in a multiple regression model by accounting for the number of predictors. The results of this test are presented in Table 4.

Tabel 4. Results of the coefficient of determination (R^2) test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.338	0.114	0.099	0.10021

Based on the output in Table 4, the model yields an Adjusted R Square value of 0.099. This result indicates that 9.9% of the total variance in the dependent variable, Return on Asset (ROA), can be explained by the combined influence of the Proportion of Independent Commissioners (PIC), Firm Size (SIZE), and the interaction between PIC and SIZE. This suggests that while the variables are statistically significant predictors, their collective explanatory power over profitability is modest. The remaining 90.1% (100% - 9.9%) of the variation in ROA is influenced by other factors and variables that were not included in this specific research model.

F. Discussion

The first finding of this study (H1) reveals that the Proportion of Independent Commissioners (PIC) has a positive and statistically significant influence on Return on Assets (ROA) (Adanan et al., 2023; Al-Saidi, 2021). This result strongly supports Agency Theory (Jensen & Meckling, 1976). This theory posits that independent commissioners are a crucial internal governance mechanism for mitigating agency costs (Mokhtar et al., 2023). By acting as objective “watchdogs,” they monitor the opportunistic behavior of management (Nahar et al., 2022). This finding indicates that within Indonesian manufacturing firms during the 2021–2023 period, independent commissioners were not merely fulfilling regulatory requirements or acting as “rubber stamps” (Lestari, 2021). Instead, their presence actively contributed to profitability (Gatehi & Nasieku, 2022). The mechanism is presumed to be stricter oversight of managerial decisions, leading to more efficient resource allocation and the prevention of value-destroying investments (Korir & Tenai, 2020). Such oversight ultimately ensures that the firm’s assets (the denominator of the ROA ratio) are utilized to generate the highest possible net income (the numerator of the ROA ratio) (Rahayu & Feliana, 2022). This finding aligns with a growing body of corporate governance literature, which shows that greater board independence leads to superior financial performance (Arora, 2024; Protus & Tuwey, 2024).

The second finding (H2) is the most significant, complex, and theoretically provocative of this study (Arora, 2024). The initial hypothesis predicted that Firm Size (SIZE) would strengthen the positive relationship between PIC and ROA (Korir & Tenai, 2020; Potharla & Amirishetty, 2021). The logic was that larger firms, with their high operational complexity and severe information asymmetry, would have a greater need for objective oversight from independent commissioners (Rahayu & Feliana, 2022; Wu, 2021). However, the empirical results show the exact opposite (Adanan et al., 2023). H2 is not supported; this study finds that Firm Size does significantly moderate the relationship, but in a negative direction (Lestari, 2021; Nahar et al., 2022).

The interpretation of this significant negative moderation is that the positive impact of independent commissioners on profitability (ROA) is strongest in smaller manufacturing firms, and this effect diminishes as firm size increases (Gatehi & Nasieku, 2022). There are several theoretical explanations for this counter-intuitive finding (Arora, 2024). First, this result may highlight the phenomenon of managerial entrenchment and board tokenism in large firms (AlSaif et al., 2022; Protus & Tuwey, 2024). In very large firms, bureaucracies are exceedingly complex, and top management possesses immense power and informational control (Nahar et al., 2022). In this environment, management may become so entrenched that even independent commissioners lack the political or informational capacity to challenge them effectively (Adanan et al., 2023). Independent commissioners might be appointed merely to satisfy regulatory requirements but become captured by management and lose influence on strategy (Lestari, 2021; Rahayu & Feliana, 2022). The very complexity that necessitates monitoring becomes a fortress insulating management from oversight (Korir & Tenai, 2020). Second, this may relate to the different primary functions of the board at varying firm scales (Mokhtar et al., 2023). In smaller firms, the board including independent commissioners often plays a more intensive advisory and resource-provider role (Gatehi & Nasieku, 2022). Smaller firms benefit immensely from the external networks and strategic expertise that independent commissioners contribute (Al-Saidi, 2021; Protus & Tuwey, 2024). In this context, their contribution to ROA is substantial because they actively help optimize limited assets (Adanan et al., 2023). Conversely, in large firms, the company already possesses deep internal management expertise, external consultants, and abundant resources (Arora, 2024). Thus, the advisory role of independent commissioners becomes less critical, and their monitoring role may be neutralized (Potharla & Amirishetty, 2021). Third, this finding may reflect differences in the dominant type of agency conflict (Wu, 2021). The literature distinguishes between Type I agency problems (manager vs. shareholder) and Type II problems (controlling vs. minority shareholder) (Nahar et al., 2022; Oruke et al., 2020). The initial hypothesis was implicitly based on a Type I framework, assuming that managers in large firms need tighter monitoring (Korir & Tenai, 2020). However, this finding may instead align with a Type II conflict more common in Asian firms, including Indonesia (Lestari, 2021). In small-to-medium firms, often founder or family-controlled, independent commissioners play a vital role in protecting minority shareholders from asset expropriation (Adanan et al., 2023; Rahayu & Feliana, 2022). By preventing firm assets from being misused for private gain, they directly safeguard and enhance ROA (Gatehi & Nasieku, 2022). In large firms, where ownership may be more dispersed, oversight proves ineffective due to managerial entrenchment (AlSaif et al., 2022). Finally, it is crucial to reconcile this finding with the fact that the SIZE control variable itself has a positive and significant effect on ROA (Pradana & Imelda, 2023). This indicates that larger firms are generally more profitable due to economies of scale, market power, and diversification (Kamau, 2023). However, the negative moderation result adds an essential nuance: the profitability advantage in large firms stems mainly from structural advantages, not from governance effectiveness (Arora, 2024; Nahar et al., 2022). The governance mechanism of independent commissioners appears to work best precisely in smaller firms (Adanan et al., 2023; Gatehi & Nasieku, 2022).

Given these findings, large firms can take several steps to mitigate the negative effects of managerial entrenchment and strengthen governance outcomes. First, firms should enhance the functional independence of their boards by appointing commissioners based not only on compliance criteria but also on expertise, tenure diversity, and professional reputation. Selection processes should be transparent, merit-based, and involve external stakeholders, such as independent nomination committees, to minimize insider influence. Second, board evaluation mechanisms must be institutionalized through periodic performance assessments that measure the actual contribution of independent commissioners in decision-making and strategic oversight. These assessments can include peer reviews, board self-evaluations, and third-party governance audits. Third, large firms should establish separation of power within governance structures, particularly by ensuring that the positions of CEO and board chair are held by different individuals. This structural separation can reduce concentration of authority and enable more balanced deliberation at the board level. Fourth, the establishment of specialized audit and risk committees led by independent members can provide targeted oversight of managerial behavior, financial reporting, and risk management practices, thereby improving transparency and accountability. Finally, continuous governance capacity building such as professional training, exposure to international best practices, and ethical leadership programs can help independent commissioners better navigate the complexities of large organizations.

4. CONCLUSION

This study was conducted to examine the effect of the proportion of independent commissioners (PIC) on Return on Assets (ROA) and to investigate the moderating role of Firm Size (SIZE) on this relationship within the Indonesian manufacturing sector from 2021-2023. Based on the moderated regression analysis of 177 firm-year observations, two primary conclusions are drawn. First, this study confirms that the proportion of independent commissioners has a positive and statistically significant effect on ROA. This finding aligns with Agency Theory, suggesting that independent commissioners fulfill their monitoring role effectively, mitigating agency costs and ensuring that managerial actions are aligned with enhancing firm profitability. Second, this study finds that Firm Size weaken the relationship between independent commissioners and ROA, but in a negative direction. This result is contrary to the initial hypothesis (H2). The empirical evidence demonstrates that the positive impact of board independence on profitability is strongest in smaller firms and significantly weakens as firms grow larger. This suggests that the value of independent oversight is not uniform; in larger, more complex organizations, the effectiveness of independent commissioners may be constrained by factors such as managerial entrenchment or board tokenism, as discussed previously.

Theoretically, this study extends Agency Theory by demonstrating that the effectiveness of governance mechanisms such as board independence is contingent upon organizational context rather than universal. In large organizations, agency conflicts evolve beyond principal–agent problems into issues of power imbalance, information asymmetry, and symbolic compliance. This implies that governance effectiveness is shaped not only by the existence of independent commissioners but by how independence is exercised and institutionalized within firm structures. From a practical perspective, the results offer several implications for policymakers, regulators, and corporate governance practitioners. For policymakers and regulators, particularly the Financial Services Authority (OJK) and the Indonesia Stock Exchange (IDX), these findings underscore the need to shift from a compliance-oriented to a performance-oriented governance framework. Current regulations focus primarily on quantitative thresholds such as requiring one-third independent commissioners but overlook the qualitative dimensions of independence, such as professional competence, integrity, and strategic influence. Policymakers should consider strengthening the regulatory framework by: (1) integrating periodic board effectiveness evaluations into corporate disclosure requirements; (2) mandating transparent and merit-based nomination processes for independent commissioners; and (3) linking compliance with governance standards to tangible performance metrics such as audit quality, risk management, and stakeholder trust. Additionally, the Ministry of State-Owned Enterprises (BUMN) could adopt a similar approach by emphasizing the independence and accountability of commissioners appointed to large state-affiliated companies, ensuring that governance reforms translate into measurable performance improvements rather than formal compliance. For corporate boards, particularly in large firms, the findings highlight the importance of enhancing the functional independence of commissioners rather than merely meeting regulatory quotas. Boards should ensure that independent commissioners possess relevant expertise, sectoral experience, and ethical judgment to provide meaningful oversight and strategic advice. Implementing regular board self-assessments, introducing independent chairmanship, and establishing well-resourced audit, nomination, and risk committees led by independent members can help counteract managerial entrenchment. Moreover, corporate governance training programs and exposure to international best practices can strengthen board members' capacity to address complex challenges in large organizations. For investors and minority shareholders, these findings provide a nuanced understanding of board independence as a performance signal. Investors should not interpret the presence of independent commissioners as a guarantee of strong governance; rather, they should evaluate how independence functions in practice. Disclosure of board evaluation outcomes, meeting attendance, and independence of thought should be emphasized as indicators of genuine oversight quality.

This research is subject to several limitations that must be acknowledged. First, the model's explanatory power, as indicated by the Adjusted R-Square of 9.9%, is modest. This implies that over 90% of the variation in ROA is determined by factors not included in this model. Second, the sample is limited to the manufacturing sector, and the findings may not be generalizable to other industries (e.g., finance, services, or technology) which have different operational characteristics and agency conflicts. Third, the observation period (2021-2023) is relatively short and represents a unique economic environment (post-pandemic recovery), which may affect the stability of the observed relationships over a longer-term, more stable economic cycle. Finally, this study used a quantitative proxy for independence (proportion) and size (total assets), which does not capture the qualitative nuances of board dynamics, such as the commissioners' actual expertise, attendance, or influence.

Based on the limitations and findings, future research could proceed in several directions. First, researchers should replicate this model in other sectors to test whether the negative moderating effect of firm size is a universal phenomenon or is specific to the manufacturing industry. Second, future studies should incorporate additional control and independent variables (e.g., leverage, firm age, capital intensity, and other governance mechanisms like ownership concentration) to build a more comprehensive model and improve the explanatory power (R-Square). Most importantly, future research should investigate the 'why' behind the negative moderation. A qualitative study, involving interviews with independent commissioners from large and small firms, could provide invaluable insights into the processes of board influence, confirming or refuting the proposed explanations of managerial entrenchment, board 'capture', or the dominance of Type II agency problems. Furthermore, future quantitative studies could move beyond the simple proportion of independent directors and examine their specific characteristics, such as financial expertise, industry experience, or network connections, as moderators.

5. REFERENCES

Adanan, S., Saidin, A., Bustamam, K., Sani, A., Samad, K., & Mamat, S. (2023). The effect of gender diversity and board independence on firms performance. International Journal of Academic Research in Business and Social Sciences, 13(10). https://doi.org/10.6007/ijarbss/v13-i10/19007

Al-Saidi, M. (2021). Board independence and firm performance: Evidence from Kuwait. *International Journal of Law and Management*, *63*(2), 251-262. https://doi.org/10.1108/ijlma-06-2019-0145

AlSaif, A. S. A., AlRuwaishd, S. S. S., & Samontaray, D. P. (2022). Do the Board Characteristics influence the Firm Performance? An Experience with the Capital-Intensive Industries Listed in the Saudi Stock Exchange (TADAWUL). *International Business Research*, *15*(9), 62-69. https://doi.org/10.5539/ibr.v15n9p62

Arora, A. (2024). Board leadership structure and firm performance: moderating effects of board independence. *Journal of Emerging Market Finance*, *23*(1), 32-55. https://doi.org/10.1177/09726527231190690

Gatehi, G. T., & Nasieku, T. (2022). Effect of board characteristics on financial performance of non-financial firms listed at the Nairobi Securities Exchange. *Advanced Journal of Social Science*, *11*(1), 1-12. https://doi.org/10.21467/ajss.11.1.1-12

Jannah, S. M., & Sartika, F. (2022). The effect of good corporate governance and company size on firm value: Financial performance as an intervening variable. *International Journal of Research in Business and Social Science*, *11*(2), 241-251. https://doi.org/10.20525/ijrbs.v11i2.1619

Jwailes, A. R. (2021). The Effect of Board Independence, Board Size, and CEO Duality on Jordanian Firm Performance. *Journal of Advance Research in Business Management and Accounting ISSN*, *2456*, 3544. https://doi.org/10.53555/nnbma.v7i8.1027

Kamau, A. (2023). Underwriting risk, firm size and financial performance of insurance firms in Kenya. *Eastern journal of economics and finance*. https://doi.org/10.55284/eastjecofin.v8i1.874

Khan, G. F., Hassan, S., & Qadeer, N. (2023). Impact of firm performance and CEO compensation with moderating role of board characteristics and audit quality. *Annals of Social Sciences and Perspective*, *4*(1), 209-230. https://doi.org/10.52700/assap.v4i1.227

Korir, F. J., & Tenai, J. K. (2020). Does structural power matter? Board attributes and firm performance: moderated by CEO duality. *SEISENSE Journal of Management*, *3*(5), 54-64. https://doi.org/10.33215/sjom.v3i5.432

Lestari, R. A. (2021). Gender diversity, board composition, intellectual capital and its effect on firm performance. *Management Analysis Journal*, *10*(1), 62-76. https://doi.org/10.15294/maj.v10i1.45522

Mohd Idris, A. (2021). The impact of board independence, gender diversity and nationality diversity on firm performance. *Asia-Pasific Management Accounting Journal*, *16*(1), 324-346. https://doi.org/10.24191/apmaj.v16i1-12

Mokhtar, I., Osman, I., Setapa, F., Arifin, N. A. M., Shafi, R. M., & Muda, R. (2023). Capital Structure–Firm Performance Nexus: The Moderating Effect of Board Independence. *Information Management and Business Review*, *15*(4), 38-47. https://doi.org/10.22610/imbr.v15i4(si)i.3575

Nahar, S., Aziz, A., & Azani, A. (2022). The effect of board independence, gender diversity and board size on firm performance in Malaysia. *Journal of Social Economics Research*, *9*(4), 179-192. https://doi.org/10.18488/35.v9i4.3226

Oruke, M., Iraya, C. M., Omoro, N. O., & Otieno, L. O. (2020). Board structure and firm performance: Evidence from state-owned enterprises in Kenya. *Research Journal of Finance and Accounting*, *11*(16), 30-42. https://doi.org/10.7176/rjfa/11-16-04

Potharla, S., & Amirishetty, B. (2021). Non-linear relationship of board size and board independence with firm performance–evidence from India. *Journal of Indian Business Research*, *13*(4), 503-532. https://doi.org/10.1108/jibr-06-2020-0180

Pradana, E. A., & Imelda, E. (2023). The Effect Of Short-Term Debt, Long-Term Debt, Tangibility, Sales Growth, Firm Size, And Debt To Asset Ratio On The Performance Of Manufacturing Companies. *International Journal of Application on Economics and Business*, *1*(3), 1512-1525. https://doi.org/10.24912/ijaeb.v1i3.1512-1525

Protus, C., & Tuwey, J. K. (2024). Board independence, CEO tenure, and private firm performance in Nairobi, Kenya. *International Journal of Emerging Trends in Social Sciences*, *16*(1), 22-31. https://doi.org/10.55217/103.v16i1.728

Qadorah, A. A., & Fadzil, F. H. (2018). The effect of board independence and board meeting on firm performance: Evidence from Jordan. *Journal of Finance and Accounting*, *6*(5), 105-109. https://doi.org/10.11648/j.jfa.20180605.11

Rahayu, E., & Feliana, Y. K. (2022). The time horizon of corporate governance effect on firm performance: a study of Indonesia financial industry firms. *Jurnal Keuangan dan Perbankan (Journal of Finance and Banking)*, *26*(4), 917-936. https://doi.org/10.26905/jkdp.v26i4.8524

Wu, C. H. (2021). On the moderating effects of country governance on the relationships between corporate governance and firm performance. *Journal of Risk and Financial Management*, *14*(3), 140. https://doi.org/10.3390/jrfm14030140